

ATTACHMENT B

SOURCES OF PAYMENT UNIT ESTIMATES FOR FY 2004

In order to calculate individual service fees for FY 2004, we adjusted FY 2003 payment units for each service to more accurately reflect expected FY 2004 payment liabilities. We obtained our updated estimates through a variety of means. For example, we used Commission licensee data bases, actual prior year payment records and industry and trade association projections when available. The databases we consulted include the Commission's Universal Licensing System (ULS), International Bureau Filing System (IBFS), and Consolidated Database System. The industry sources we consulted include, but are not limited to, *Television & Cable Factbook* by Warren Publishing, Inc. and the *Broadcasting and Cable Yearbook* by Reed Elsevier, Inc., as well as reports generated within the Commission such as the Wireline Competition Bureau's *Trends in Telephone Service* and the Wireless Telecommunications Bureau's *Numbering Resource Utilization Forecast*.

We tried to obtain verification for these estimates from multiple sources and, in all cases, we compared FY 2004 estimates with actual FY 2003 payment units to ensure that our revised estimates were reasonable. Where appropriate, we adjusted and/or rounded our final estimates to take into consideration the fact that certain variables that impact on the number of payment units cannot yet be estimated exactly. These include an unknown number of waivers and/or exemptions that may occur in FY 2004 and the fact that, in many services, the number of actual licensees or station operators fluctuates from time to time due to economic, technical or other reasons. Therefore, when we note, for example, that our estimated FY 2004 payment units are based on FY 2003 actual payment units, it does not necessarily mean that our FY 2004 projection is exactly the same number as FY 2003. It means that we have either rounded the FY 2004 number or adjusted it slightly to account for these variables.

FEE CATEGORY	SOURCES OF PAYMENT UNIT ESTIMATES
Land Mobile (All), Microwave, 218-219 MHz, Marine (Ship & Coast), Aviation (Aircraft & Ground), GMRS, Amateur Vanity Call Signs, Domestic Public Fixed	Based on Wireless Telecommunications Bureau (WTB) projections of new applications and renewals taking into consideration existing Commission licensee data bases. Aviation (Aircraft) and Marine (Ship) estimates have been adjusted to take into consideration the licensing of portions of these services on a voluntary basis.
CMRS Mobile Services	Based on Wireless Telecommunications Bureau estimates.
CMRS Messaging Services	Based on Wireless Telecommunications Bureau estimates.
AM/FM Radio Stations	Based on estimates from Media Services Bureau estimates and actual FY 2003 payment units.
UHF/VHF Television Stations	Based on Media Services Bureau estimates and actual FY 2003 payment units.
AM/FM/TV Construction Permits	Based on Media Services Bureau estimates and actual FY 2003 payment units.
LPTV, Translators and Boosters	Based on actual FY 2003 payment units.
Broadcast Auxiliaries	Based on actual FY 2003 payment units.
MDS/LMDS/MMDS	Based on Wireless Telecommunications Bureau estimates and actual FY 2003 payment units.
Cable Television Relay Service (CARS) Stations	Based on actual FY 2003 payment units.
Cable Television System Subscribers	Based on Media Services Bureau (previously Cable Services Bureau), industry estimates of subscribership, and actual FY 2003

	payment units.
Interstate Telecommunication Service Providers	Based on actual FY 2003 interstate revenues reported on Telecommunications Reporting Worksheet, adjusted for FY 2004 revenue growth/decline for industry, and estimations by the Wireline Competition Bureau.
Earth Stations	Based on actual FY 2003 payment estimates and projected FY 2004 units.
Space Stations (GSOs & NGSOs)	Based on International Bureau licensee data base estimates.
International Bearer Circuits	Based on International Bureau estimates.
International HF Broadcast Stations, International Public Fixed Radio Service	Based on International Bureau estimates.

ATTACHMENT C

CALCULATION OF FY 2004 REVENUE REQUIREMENTS AND PRO-RATA FEES

Regulatory fees for the categories shaded in gray are collected by the Commission in advance to cover the term of the license and are submitted along with the application at the time the application is filed.

Fee Category	FY 2004 Payment Units	Years	FY 2003 Revenue Estimate	Pro-Rated FY 2004 Revenue Require- ment**	Computed New FY 2004 Regulatory Fee	Rounded New FY 2004 Regula- tory Fee	Expected FY 2004 Revenue
PLMRS (Pay-Per-Use)	3,400	10	340,000	334,916	10	10	340,000
PLMRS (Standard Use)	46,000	10	4,600,000	4,504,157	6	6	4,500,000
MMRMS	3,000	10	3,000,000	2,957,316	50	50	3,000,000
242-419 MHz (Standard)	1,500	10	1,500,000	1,492,157	60	60	1,500,000
Marine (Standard)	1,500	10	1,500,000	1,492,157	60	60	1,500,000
GPMS	1,500	10	1,500,000	1,492,157	60	60	1,500,000
AM Class A	69	1	195,000	198,560	2,878	2,875	198,375
AM Class B	1,699	1	2,384,800	2,428,337	1,429	1,425	2,421,075
AM Class C	990	1	828,300	843,421	852	850	841,500
AM Class D	1,888	1	2,728,350	2,778,159	1,471	1,475	2,784,800
FM Classes A, B1 & C3	3,220	1	5,544,000	5,701,258	1,771	1,775	5,715,500
FM Classes B, C, C0, C1 & C2	3,022	1	6,875,050	7,056,607	2,335	2,325	7,026,150
AM Construction Permits	73	1	21,840	33,855	464	465	33,945
FM Construction Permits	162	1	373,700	268,430	1,657	1,650	267,300
Satellite TV	122	1	126,000	129,369	1,060	1,050	128,100
Satellite TV Construction Permit	3	1	2,575	1,553	518	520	1,560
VHF Markets 1-10	43	1	2,536,600	2,595,946	60,371	60,375	2,596,125

Fee Category	FY 2004 Payment Units	Years	FY 2003 Revenue Estimate	Pro-Rated FY 2004 Revenue Require- ment**	Computed New FY 2004 Regulatory Fee	Rounded New FY 2004 Regula- tory Fee	Expected FY 2004 Revenue
VHF Markets 11-25	64	1	2,593,500	2,653,885	41,467	41,475	2,654,400
VHF Markets 26-50	77	1	2,199,125	2,246,372	29,174	29,175	2,246,475
VHF Markets 51-100	123	1	2,114,775	2,160,482	17,565	17,575	2,161,725
VHF Remaining Markets	235	1	930,050	954,129	4,060	4,050	951,750
VHF Construction Permits	6	1	74,000	27,974	4,662	4,650	27,900
UHF Markets 1-10	90	1	1,521,600	1,600,803	17,787	17,775	1,599,750
UHF Markets 11-25	81	1	1,236,000	1,309,989	16,173	16,175	1,310,175
UHF Markets 26-50	117	1	1,041,675	1,088,742	9,305	9,300	1,088,100
UHF Markets 51-100	170	1	900,475	944,964	5,559	5,550	943,500
UHF Remaining Markets	183	1	270,750	303,743	1,660	1,650	301,950
UHF Construction Permits	34	1	373,500	193,319	5,686	5,675	192,950
Broadcast Auxiliaries	25,000	1	250,000	254,564	10	10	250,000
LPTV/Trans- lators/Boosters	2,900	1	1,092,445	1,112,389	384	385	1,116,500
CARS Stations	1,000	1	130,500	132,882	133	135	135,000
Cable Television Systems	65,000,000	1	44,550,000	45,363,307	0.70	0.70	45,500,000
Interstate Tele- communication Service Providers	58,500,000,000	1	125,370,000	127,658,761	0.0021822	0.00218	127,530,000
CMRS Mobile Services (Cellular/Public Mobile)	153,000,000	1	36,868,000	38,695,143	0.253	0.25	38,250,000
CMRS Messaging Services	14,500,000	1	1,576,000	1,160,693	0.08	0.08	1,160,000

Fee Category	FY 2004 Payment Units	Years	FY 2003 Revenue Estimate	Pro-Rated FY 2004 Revenue Require- ment**	Computed New FY 2004 Regulatory Fee	Rounded New FY 2004 Regula- tory Fee	Expected FY 2004 Revenue
MDS/MMDS	1,600	1	956,915	434,894	272	270	432,000
LMDS	340	1	258,375	92,582	272	270	91,800
International Bearer Circuits	2,800,000	1	6,942,000	7,068,733	2.52	2.52	7,056,000
International Public Fixed	1	1	1,725	1,756	1,756	1,750	1,750
Earth Stations	3,400	1	661,290	673,363	198	200	680,000
International HF Broadcast	5	1	3,650	3,717	743	745	3,725
Space Stations (Geostationary)	77	1	8,671,875	8,830,189	114,678	114,675	8,829,975
Space Stations (Non- Geostationary)	5	1	758,625	657,000	131,400	131,400	657,000
***** Total Estimated Revenue to be Collected			268,951,805	273,737,819			272,821,674
***** Total Revenue Requirement				272,958,000			272,958,000
Difference				779,819			(136,326)

** 1.01471 factor applied based on the amount Congress designated for recovery through regulatory fees (Public Law 108-7 and 47 U.S.C. § 159(a)(2)).

ATTACHMENT D

FY 2004 SCHEDULE OF REGULATORY FEES

Regulatory fees for the categories shaded in gray are collected by the Commission in advance to cover the term of the license and are submitted along with the application at the time the application is filed.

Fee Category	Annual Regulatory Fee (U.S. \$'s)
PERMITS (per license) (Excluded from 47 CFR parts 20, 22, 24, 27, 80 and 90)	
Marine (Coast) (per license) (47 CFR part 101)	
21.0-20 MHz (per license) (47 CFR part 101)	
Marine (Ship) (per license) (47 CFR part 101)	
Marine (Coast) (per license) (47 CFR part 101)	
General Mobile Radio Services (per license) (47 CFR parts 20, 22, 24, 27, 80 and 90)	
Mobile (Land) (per license) (47 CFR parts 20, 22, 24, 27, 80 and 90)	
Private Land Mobile (per license) (47 CFR parts 20, 22, 24, 27, 80 and 90)	
Aviation (Airborne) (per license) (47 CFR parts 20, 22, 24, 27, 80 and 90)	
Aviation (Ground) (per license) (47 CFR parts 20, 22, 24, 27, 80 and 90)	
Amateur (Vanity Call Signs) (per license) (47 CFR parts 20, 22, 24, 27, 80 and 90)	
CMRS Mobile/Cellular Services (per unit) (47 CFR parts 20, 22, 24, 27, 80 and 90)	.25
CMRS Messaging Services (per unit) (47 CFR parts 20, 22, 24 and 90)	.08
Multipoint Distribution Services (MMDS/ MDS) (per call sign) (47 CFR part 21)	270
Local Multipoint Distribution Service (per call sign) (47 CFR, part 101)	270
AM Radio Construction Permits	465
FM Radio Construction Permits	1,650
TV (47 CFR part 73) VHF Commercial	
Markets 1-10	60,375
Markets 11-25	41,475
Markets 26-50	29,175
Markets 51-100	17,575
Remaining Markets	4,050
Construction Permits	4,650
TV (47 CFR part 73) UHF Commercial	

Fee Category	Annual Regulatory Fee (U.S. \$'s)
Markets 1-10	17,775
Markets 11-25	16,175
Markets 26-50	9,300
Markets 51-100	5,550
Remaining Markets	1,650
Construction Permits	5,675
Satellite Television Stations (All Markets)	1,050
Construction Permits – Satellite Television Stations	520
Low Power TV, TV/FM Translators & Boosters (47 CFR part 74)	385
Broadcast Auxiliaries (47 CFR part 74)	10
CARS (47 CFR part 78)	135
Cable Television Systems (per subscriber) (47 CFR part 76)	.70
Interstate Telecommunication Service Providers (per revenue dollar)	.00218
Earth Stations (47 CFR part 25)	200
Space Stations (per operational station in geostationary orbit) (47 CFR part 25) also includes DBS Service (per operational station) (47 CFR part 100)	114,675
Space Stations (per operational system in non-geostationary orbit) (47 CFR part 25)	131,400
International Bearer Circuits (per active 64KB circuit)	2.52
International Public Fixed (per call sign) (47 CFR part 23)	1,750
International (HF) Broadcast (47 CFR part 73)	745

FY 2004 SCHEDULE OF REGULATORY FEES (continued)

FY 2004 RADIO STATION REGULATORY FEES						
Population Served	AM Class A	AM Class B	AM Class C	AM Class D	FM Classes A, B1 & C3	FM Classes B, C, C0, C1 & C2
<=25,000	600	450	350	425	525	675
25,001 – 75,000	1,200	900	525	625	1,050	1,175
75,001 – 150,000	1,800	1,125	700	1,075	1,450	2,200
150,001 – 500,000	2,700	1,925	1,050	1,275	2,225	2,875
500,001 – 1,200,000	3,900	2,925	1,750	2,125	3,550	4,225
1,200,001 – 3,000,00	6,000	4,500	2,625	3,400	5,775	6,750
>3,000,000	7,200	5,400	3,325	4,250	7,350	8,775

ATTACHMENT E

FACTORS, MEASUREMENTS AND CALCULATIONS THAT GO INTO DETERMINING
STATION SIGNAL CONTOURS AND ASSOCIATED POPULATION COVERAGESAM Stations

For stations with nondirectional daytime antennas, the theoretical radiation was used at all azimuths. For stations with directional daytime antennas, specific information on each day tower, including field ratio, phasing, spacing and orientation was retrieved, as well as the theoretical pattern root-mean-square of the radiation in all directions in the horizontal plane (RMS) figure milliVolt per meter (mV/m) @ 1 km for the antenna system. The standard, or modified standard if pertinent, horizontal plane radiation pattern was calculated using techniques and methods specified in §§73.150 and 73.152 of the Commission's rules.²⁸¹ Radiation values were calculated for each of 360 radials around the transmitter site. Next, estimated soil conductivity data was retrieved from a database representing the information in FCC Figure R3²⁸². Using the calculated horizontal radiation values, and the retrieved soil conductivity data, the distance to the city grade (5 mV/m) contour was predicted for each of the 360 radials. The resulting distance to city grade contours were used to form a geographical polygon. Population counting was accomplished by determining which 2000 block centroids were contained in the polygon. (A block centroid is the center point of a small area containing population as computed by the U.S. Census Bureau.) The sum of the population figures for all enclosed blocks represents the total population for the predicted city grade coverage area.

FM Stations

The greater of the horizontal or vertical effective radiated power (ERP) (kW) and respective height above average terrain (HAAT) (m) combination was used. Where the antenna height above mean sea level (HAMSL) was available, it was used in lieu of the average HAAT figure to calculate specific HAAT figures for each of 360 radials under study. Any available directional pattern information was applied as well, to produce a radial-specific ERP figure. The HAAT and ERP figures were used in conjunction with the Field Strength (50-50) propagation curves specified in 47 C.F.R. § 73.313 of the Commission's rules to predict the distance to the city grade (70 dBu (decibel above 1 microVolt per meter) or 3.17 mV/m) contour for each of the 360 radials.²⁸³ The resulting distance to city grade contours were used to form a geographical polygon. Population counting was accomplished by determining which 2000 block centroids were contained in the polygon. The sum of the population figures for all enclosed blocks represents the total population for the predicted city grade coverage area.

²⁸¹ 47 C.F.R. §§ 73.150 and 73.152.

²⁸² See *Map of Estimated Effective Ground Conductivity in the United States*, 47 C.F.R. § 73.190 Figure R3.

²⁸³ 47 C.F.R. § 73.313.

ATTACHMENT F**Parties Filing Comments on the Notice of Proposed Rulemaking**

Chris Kidd
XO Communications, Inc. ("XO")
National Cable & Telecommunications Association ("NCTA")
Cingular Wireless LLC ("Cingular")
Rural Cellular Association ("RCA")
New Operating Globalstar LLC ("Globalstar")
Cellular Telecommunications and Internet Association ("CTIA")
Tyco Communications (US) Inc. ("Tyco")
American Cable Association ("ACA")
Kenneth J. Brown

Parties Filing Reply Comments

FLAG Telecom Group Limited ("FLAG")
Rural Telecommunications Group, Inc. ("RTG")
Verizon Wireless ("Verizon")
Space Imaging LLC ("Space Imaging")
ORBCOMM LLC & ORBCOMM License Corp. ("ORBCOMM")
Verizon ("Verizon")
The Satellite Industry Association ("SIA")
Dobson Communications Corporation ("Dobson")

ATTACHMENT G

FY 2003 SCHEDULE OF REGULATORY FEES

Fee Category	Annual Regulatory Fee (U.S. \$'s)
PLMRS (per license) (Exclusive Use) (47 CFR part 90)	10
Microwave (per license) (47 CFR part 101)	25
218-219 MHz (Formerly Interactive Video Data Service) (per license) (47 CFR part 95)	30
Marine (Ship) (per station) (47 CFR part 80)	15
Marine (Coast) (per license) (47 CFR part 80)	10
General Mobile Radio Service (per license) (47 CFR part 95)	5
Rural Radio (47 CFR part 22) (previously listed under the Land Mobile category)	5
PLMRS (Shared Use) (per license) (47 CFR part 90)	5
Aviation (Aircraft) (per station) (47 CFR part 87)	5
Aviation (Ground) (per license) (47 CFR part 87)	15
Amateur Vanity Call Signs (per call sign) (47 CFR part 97)	1.63
CMRS Mobile/Cellular Services (per unit) (47 CFR parts 20, 22, 24, 27, 80 and 90)	.26
CMRS Messaging Services (per unit) (47 CFR parts 20, 22, 24 and 90)	.08
Multipoint Distribution Services (MMDS/ MDS) (per call sign) (47 CFR part 21)	265
Local Multipoint Distribution Service (per call sign) (47 CFR, part 101)	265
AM Radio Construction Permits	455
FM Radio Construction Permits	1,850
TV (47 CFR part 73) VHF Commercial	
Markets 1-10	57,650
Markets 11-25	43,225
Markets 26-50	30,125
Markets 51-100	18,075
Remaining Markets	4,450
Construction Permits	4,625
TV (47 CFR part 73) UHF Commercial	
Markets 1-10	15,850
Markets 11-25	12,875

Fee Category	Annual Regulatory Fee (U.S. \$'s)
Markets 26-50	8,075
Markets 51-100	4,975
Remaining Markets	1,425
Construction Permits	8,300
Satellite Television Stations (All Markets)	1,000
Construction Permits – Satellite Television Stations	515
Low Power TV, TV/FM Translators & Boosters (47 CFR part 74)	365
Broadcast Auxiliary (47 CFR part 74)	10
CARS (47 CFR part 78)	90
Cable Television Systems (per subscriber) (47 CFR part 76)	.66
Interstate Telecommunication Service Providers (per revenue dollar)	.00199
Earth Stations (47 CFR part 25)	210
Space Stations (per operational station in geostationary orbit) (47 CFR part 25) also includes Direct Broadcast Satellite Service (per operational station) (47 CFR part 100)	115,625
Space Stations (per operational system in non-geostationary orbit) (47 CFR part 25)	108,375
International Bearer Circuits (per active 64KB circuit)	2.67
International Public Fixed (per call sign) (47 CFR part 23)	1,725
International (HF) Broadcast (47 CFR part 73)	730

FY 2003 SCHEDULE OF REGULATORY FEES (continued)

FY 2003 RADIO STATION REGULATORY FEES						
Population Served	AM Class A	AM Class B	AM Class C	AM Class D	FM Classes A, B1 & C3	FM Classes B, C, C0, C1 & C2
<=25,000	600	450	325	400	475	625
25,001 – 75,000	1,200	900	475	600	950	1,100
75,001 – 150,000	1,800	1,125	650	1,000	1,300	2,025
150,001 – 500,000	2,700	1,925	975	1,200	2,025	2,650
500,001 – 1,200,000	3,900	2,925	1,625	2,000	3,200	3,900
1,200,001 – 3,000,00	6,000	4,500	2,450	3,200	5,225	6,250
>3,000,000	7,200	5,400	3,100	4,000	6,650	8,125

**STATEMENT OF
COMMISSIONER MICHAEL COPPS
CONCURRING**

Re: Assessment and Collection of Regulatory Fees for Fiscal Year 2004

I respectfully concur in today's decision. This year the Commission again relies on across-the-board proportionate increases from the previous year's schedule of fees. I am concerned that the Commission does not address when or how it would adjust the regulatory fees pursuant to section 9(b)(3) of the Act. I recognize the difficulty the Commission has had in developing a cost accounting system to be used in connection with regulatory fees. Nevertheless, as technology advances and our regulatory activities change, we must continue to look for ways to improve our regulatory fee methodology to ensure that we continue to comply fully with the Act's requirements.

**STATEMENT OF
COMMISSIONER JONATHAN ADELSTEIN
APPROVING IN PART, CONCURRING IN PART**

*Re: Assessment and Collection of Regulatory Fees for Fiscal Year 2004;
MD Docket No. 04-73*

Last year, I provided in detail a number of concerns with the methodology used by the Commission in determining regulatory fees. I appreciate the efforts in this item to respond to some of the problems that I raised at that time and the item's candor in assessing the Commission's difficulties in implementing a more granular cost-based accounting system. I also want to thank the staff of the Office of General Counsel and the Office of the Managing Director for their continued dialogue on these complicated issues.

Implementation of Section 9 of the Act raises a number of challenges for the Commission in that it allows for both cost-based and benefits-based adjustments but puts in place criteria for certain changes to the regulatory fee schedule. Clearly, the Commission does have some discretion in making adjustments to the fees, and the Commission is free to depart from strictly cost-based fees. However, I can only concur to certain portions of the Report and Order because I remain concerned about the impracticality of the Commission considering significant changes that undoubtedly occur from time to time in the costs of regulatory fees for individual services.